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| Fapas® REFERENCE MATERIAL DATA SHEET | TYG091RM |
| Matrix | Milk Powder |
| Weight / Volume of Contents | 50 g |
| Description of material: The material was prepared from milk powder procured from a retail source. All analytes were present at natural levels. | |

| Analyte | Reference Value | Expanded uncertainty U ($k = 2$) | Units | No. of data points producing Reference Value |
|-----------------|-----------------|--------------------------------------|------------------|--|
| Calcium (Ca) | 975 | ± 15 | mg/100g | 64 |
| Iodine (I) | 1.24 | ± 0.06 | mg/kg | 23 |
| Magnesium (Mg) | 863 | ± 19 | mg/kg | 57 |
| Phosphorus (P) | 754 | ± 13 | mg/100g | 49 |
| Potassium (K) | 1245 | ± 22 | mg/100g | 51 |
| Selenium (Se) | 138 | ± 7 | $\mu\text{g/kg}$ | 37 |
| Sodium (Na) | 305 | ± 5 | mg/100g | 57 |
| Iron (Fe) | 1.37 | ± 0.19 | mg/kg | 40 |
| Copper (Cu) | 0.316 | ± 0.024 | mg/kg | 36 |
| Zinc (Zn) | 29.0 | ± 0.8 | mg/kg | 57 |
| Manganese (Mn) | 0.197 | ± 0.008 | mg/kg | 35 |
| Molybdenum (Mo) | 0.568 | ± 0.021 | mg/kg | 33 |

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| Date reference values were generated | 16/02/2021 |
| Reference values are valid until | 16/02/2023 |
| Recommended storage conditions on receipt | -20 °C |
| This material was approved on behalf of Fapas® by | Joe Holland |

Notes

- Mix the reference material thoroughly before taking a representative analytical sample. It is intended to be used as a single-analysis sample (plus confirmation) for analytical quality control purposes, method verification and as a characterised positive control sample. The recommended minimum analytical sub-sample size is 0.5 g.
- This is a reference material, not a certified reference material.
- This reference material has been produced according to the principles of ISO 17034:2016.
- The characterised reference values have been derived from the results consensus of ISO 17025 accredited laboratories in an interlaboratory comparison, using a variety of methods. The traceability is inherent in the accreditation status of the results used.
- The Expanded Uncertainty U corresponds to a confidence level of about 95%. U has been derived from the observed standard deviation of the consensus data (the major component) plus contributions from homogeneity and stability studies. U corresponds to real-world uncertainty of the analysis in a food matrix, not of a pure substance.
- The stability of the reference material has been established from a formal study. The stability components combine long term (ideal storage) and short term stability (transportation) conditions. The validity date may be extended if supporting data becomes available.